

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claims 1-94 (cancelled)

95. (new) A device that comprises a substrate comprising a surface coated with a hydrogel polymer blend composition, wherein the composition comprises (i) a first photo-crosslinked polymer and (ii) a different second polymer comprising a selective binding functionality, wherein the device is mass spectrometer.

96. (new) The device according to claim **95** wherein photo-crosslinking results from reacting benzophenone groups on the first polymer.

97. (new) The device according to claim **95**, wherein the first polymer is further crosslinked with the second polymer.

98. (new) The device according to claim **96**, wherein the first polymer is further crosslinked with the second polymer and the first and second polymers comprise a polysaccharide.

99. (new) The device according to claim **98**, wherein the polysaccharide is dextran.

100. (new) The device according to claim **95**, wherein the first and second polymers are in the form of an interpenetrating polymer network.

101. (new) The device according to claim **95**, wherein the first polymer comprises a polysaccharide.

102. (new) The device according to claim **101**, wherein the polysaccharide comprises dextran.

103. (new) The device according to claim **95**, wherein the second polymer comprises a polysaccharide.

104. (new) The device according to claim **103**, wherein the polysaccharide comprises dextran.

105. (new) The device according to claim **95**, wherein the first and second polymers comprise polysaccharides.

106. (new) The device according to claim **105**, wherein the polysaccharides comprise dextran.

107. (new) The device according to claim **95**, wherein the first polymer comprises a poly-acrylamide or a poly-methacrylamide.

108. (new) The device according to claim **95**, wherein the second polymer comprises a poly-acrylamide or a poly-methacrylamide.

109. (new) The device according to claim **95**, wherein the selective binding functionality is selected the group consisting of a positively charged moiety, a negatively charged moiety, an anion exchange moiety, a cation exchange moiety, a metal ion complexing moiety, a metal complex, a polar moiety and a hydrophobic moiety.

110. (new) The device according to claim **95**, wherein the selective binding functionality is a biospecific binding functionality.

111. (new) The device according to claim **110**, wherein the biospecific binding functionality is selected from the group consisting of antibodies, receptor proteins and nucleic acids.

112. (new) The device according to claim **95**, wherein the selective binding functionality comprises a group for covalently binding a molecule.

113. (new) The device according to claim **112**, wherein the selective binding functionality is an epoxide or a carbodiimidazole.

114. (new) The device according to claim **95**, wherein the selective binding functionality is bound to an analyte selected from the group consisting of polypeptides, nucleic acids, carbohydrates and lipids.

115. (new) The device according to claim **114**, wherein a matrix for laser desorption/ionization mass spectrometry is applied to the surface.

116. (new) The device according to claim **95**, wherein the hydrogel polymer blend composition is covalently bound to the surface.

117. (new) The device according to claim **95**, wherein the hydrogel polymer blend composition is physically attached to the surface.

118. (new) The device according to claim **95**, wherein the hydrogel polymer blend composition is a film having a film thickness of about one micron to about 10 microns.

119. (new) The device according to claim **95**, wherein the substrate comprises aluminum.

120. (new) The device according to claim **95**, wherein the substrate comprises a primer layer that comprises a silane, a hydrocarbon silane, a fluorinated silane, a mixed fluorinated/hydrocarbon silane, a polymer, an alkoxysilane, a chlorosilane, an alkanethiol or a disulfide.

121. (new) The device according to claim **95**, wherein the substrate comprises plastic, glass, silicon, metal, or metal oxide.

122. (new) The device according to claim **95**, wherein the hydrogel is a uniform layer on the surface.

123. (new) The device according to claim **95**, wherein the hydrogel is in the form of discreet spots on the surface.

124. (new) The device according to claim **95**, wherein the substrate is a biochip.

125. (new) The device according to claim **95**, wherein the hydrogel polymer blend composition further comprises an energy absorbing moiety.